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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,129	03/02/2004	Hiroyuki Kumai	500.43556X00	2894

20457 7590 02/26/2007	**EXAMINER**	
ANTONELLI, TERRY, STOUT & KRAUS, LLP	TRUONG, CAM Y T	
1300 NORTH SEVENTEENTH STREET		
SUITE 1800	**ART UNIT**	**PAPER NUMBER**
ARLINGTON, VA 22209-3873	2162	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/790,129	KUMAI, HIROYUKI
	Examiner	Art Unit	
	Cam Y T. Truong	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8-12* is/are rejected.

7)☒ Claim(s) *7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *3/2/2004*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-12 are pending in this Office Action.

Information Disclosure Statement

2.   Information disclosure statement filed 3/2/2004 is not translated into

English so that Examiner did not considered this IDS.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or
> composition of matter, or any new and useful improvement thereof, may obtain a patent
> therefor, subject to the conditions and requirements of this title.

4.   Claims 1-7 and 11-12 are rejected under 35 U.S.C.101 because the

language of the claim raises a question as to whether the claim is directed

merely to an abstract idea that is not tied to a technological art, environment or

machine which would result in a practice application producing a concrete,

useful, and tangible result to form the basis of statutory subject matter under 35

U.S.C 101.

Claims 1-7 recites "a information mining system". However, the claims fail

to contain a computer that is used implemented the system so as to produce a

concrete, useful, and tangible result. Thus, the bodies of claims are merely

abstract idea and are being processed without any links to a practical result in

the technology arts and without computer manipulation.

Claims 11-12 recites "a program". This program is not in any type of any

new and useful process, machine, manufacture, or composition of matter, or any

new and useful improvement thereof, may obtain a patent therefor, subject to the

conditions and requirements of this title. Thus, the bodies of claims are merely

abstract ideas and are being processed without any links to a practical result in

the technology arts and without computer manipulation.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6.   Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

The phrase "operated in such a manner" in claim 1, line 13, is unclear

whether "operation history" is operated in such a manner or "analyzing operation"

is operated in such a manner.

Dependent claims 2-7 are rejected under the same basis

.   Claim 12 recites the limitation "said notification reception" in line 17.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

said subject matter pertains. Patentability shall not be negatived by the manner in which the
invention was made.

8.   Claims 1-5, 9-11 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Boothby (US 6405218) in view of LaRue et al (or hereinafter

"LaRue") (US 6401104).

As to claim 1, Boothby teaches the claimed limitation an information

mining system for analyzing data stored in a database by employing an analyzing

tool (figs. 1&2), comprising:

"an operation history data holding unit for recording therein both an

operation history of the analyzing tool which was carried out in the past in said

analyze operation, and an operation history of the analyzing tool under analyzing

operation" as a computer for recording both records of two databases of a

synchronization program and a history file that contains records since the

previous synchronization of the program. A history file is represented as an

operation history. Records of two database are represented as an operation

history of the analyzing tool under analyzing operation (col. 3, lines 65-67; col. 4,

lines 1-10);

"a history comparing unit for judging as to whether or not said operation

history of the analyzing tool executed in the past is resembled to the operation

history of the analyzing tool under analyzing operation, and operated in such a

manner that when said history comparing unit judges that the operation history of

the analyzing tool executed in the past is resembled to at least a portion of the

operation history of the analyzing tool under analyzing operation" as comparing

records in a database with records in history file to determine a matching

between these two records for linking between two records (col. 10, lines 5-25).

Boothby does not explicitly teach the claimed limitation "the history

comparing unit notifies said partial resemblance of the operation history with

respect to the analyzing tool under analyzing operation".

LaRue teaches establishing a mapping between a received client record

to an equivalent record, the synchronizer avoids a problematic approach of

creating a new GUD record, mapping the client record to the new record and only

thereafter noticing that the new record would be duplicate and only then deleting

the old record to eliminate the duplication (paragraph 0057).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply LaRue's teaching of noticing that new

record would be duplicate to Boothby's system in order to eliminate storing

duplicate record so that saving memory space for storing another new records.

As to claim 2, Boothby teaches the claimed limitation "a terminal equipped

with said analyzing tool is connected to the information mining system, into which

an operation of said analyzing tool is entered" as (fig. 1, col. 3, lines 65-67; col. 4,

lines 1-20), "said operation history data holding unit records therein a history of

the operation of said analyzing tool entered into said terminal" as (col. 10, lines 5-

25).

As to claim 3, Boothby teaches the claimed limitation "said terminal is comprised of an analyzing purpose data holding unit for holding therein at least a portion of the data stored in the database" as (col. 3, lines 65-67; col. 4, lines 1-5), "said analyzing tool analyzes the data held in said analyzing-purpose holding unit" as (col. 6, lines 10-45).

As to claim 4, Boothby does not explicitly teach the claimed limitation "said information mining system is further comprised of: a consequence data holding unit for holding therein operation history data in correspondence with such a fact that said operation history data has been recorded in any of the operation histories recorded in said operation history data holding unit" as (col. 11, lines 60-67; col. 12, lines 1-20).

As to claim 5, Boothby teaches the claimed limitation "said consequence data holding unit records therein a consequence which is obtained by said analyzing operation, and holds a correspondence relationship between said operation history sand said consequence; and in the case that said history comparing nit judges that the recorded content of said operation history holding unit is resembled to at least a portion of the recorded content of said sequence data hold unit" as (col. 11, lines 60-67; col. 12, lines 1-20; col. 2, lines 40-52).

Boothby does not explicitly teach the claimed limitation "said history comparing unit notifies such a partial resemblance of the recorded content with respect to the analyzing tool under analyzing operation".

LaRue teaches establishing a mapping between a received client record to an equivalent record, the synchronizer avoids a problematic approach of creating a new GUD record, mapping the client record to the new record and only thereafter noticing that the new record would be duplicate and only then deleting the old record to eliminate the duplication (paragraph 0057).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply LaRue's teaching of noticing that new record would be duplicate to Boothby's system in order to eliminate storing duplicate record so that saving memory space for storing another new records.

As to claim 9, Boothby teaches the claimed limitation "said information mining terminal is comprised of said analyzing tool; and the analyzing tool analyzes the data stored in the database by employing a calculation resource provided in said information mining terminal" as (col. 3, lines 65-67; col. 4, lines 1-10; col. 6, lines 30-45).

As to claim 10, Boothby teaches the claimed limitation "wherein said information mining terminal is comprised of an analyzing-purpose data holding unit for holding therein at least a portion of said data stored in said database; and said analyzing tool analyzes the data held in said analyzing-purpose data holding unit" as (col. 6, lines 30-65).

As to claim 11, Boothby teaches the claimed limitations:

"wherein said program causes said information mining system to execute:

a sesquence for recording an operation history of an analyzing tool which has

been carried out in said analyzing operation, an a consequence obtained by said

analyzing operation in correspondence with said operation history" as a

computer for recording both records of two databases of a synchronization

program and a history file that contains records since the previous

synchronization of the program. A history file is represented as an operation

history. Records of two database are represented as an operation history of the

analyzing tool under analyzing operation (col. 3, lines 65-67; col. 4, lines 1-10);

"a sequence for recording an operation history of the analyzing tool under

analyzing operation" as (fig. 3; col. 3, lines 65-67; col. 4, lines 1-10);

"a sequence executed in such a manner that when such a

judgement is made that the operation history recorded in correspondence with

said consequence is resembled to a least a portion of the operation history under

said analyzing operation" as comparing records in a database with records in

history file to determine a matching between these two records for linking

between two records (col. 10, lines 5-25).

Boothby does not explicitly teach the claimed limitation "such a partial

resemblance of the operation histories is notified with respect to the analyzing

tool under said analyzing operation".

LaRue teaches establishing a mapping between a received client record

to an equivalent record, the synchronizer avoids a problematic approach of

creating a new GUD record, mapping the client record to the new record and only

thereafter noticing that the new record would be duplicate and only then deleting the old record to eliminate the duplication (paragraph 0057).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply LaRue's teaching of noticing that new record would be duplicate to Boothby's system in order to eliminate storing duplicate record so that saving memory space for storing another new records.

9.   Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boothby (US 6405218) in view of LaRue et al (or hereinafter "LaRue") (US 6401104) and further in view of Kreulen et al (or hereinafter "Kreulen") (US 6424971).

As to claim 6, Boothby teaches the claimed limitation "in the case that said history comparing unit judges that the operation history of the analyzing tool executed in the past is resembled to at least a portion of the operation history of the analyzing tool under analyzing operation" as (col. 2, lines 40-51).

Boothby does not explicitly teach the claimed limitation "said history comparing unit classifies the consequence which has been recorded in correspondence with said operation history".

Kreulen teaches classification documents (col. 3, lines 55-65).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Kreulen's teaching of classification documents to Boothby's system in order to increase common for organizations documents so that a user can search documents in large database quickly.

10.   Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Boothby (US 6405218) in view of Akella et al (or hereinafter

"Akella") (US 20020178146).

As to claim 8, Boothby teaches the claimed limitations:

"in such a case that said information mining system judges that a recorded

content of an operation history of the analyzing tool under analyzing operation is

resembled to at least a portion of a recorded content of an operation history of

the analyzing tool which was carried in said analyzing operation" as records of

the history file corresponding to the deleted records are identified by performing a

comparison of the further computer generated data with the history file. Records

of the history file corresponding to records of the first database deleted since the

previous synchronization are identified by performing a comparison of the history

file and a result of determining which of the records of the first database have

been added (col. 2, lines 45-52).

. Boothby does not explicitly teach the claimed limitation "said information

mining terminal displays said partial resemblance of said partial resemblance of

said recorded contents".

Akella teaches the retrieved snapshot data is overlaid onto the current

database record and displayed to the user. The display may also visually

highlight differences between the current database record and the snapshot data

so that the user can easily see which fields are different between the current

database record and the snapshot record (paragraph [0040]).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Akella's teaching of the retrieved snapshot data is overlaid onto the current database record and displayed to the user. The display may also visually highlight differences between the current database record and the snapshot data so that the user can easily see which fields are different between the current database record and the snapshot record to Boothby's system in order to allow a user can easily see which fields are different and the same between the current database record and the snapshot record.

As to claim 12, Boothby teaches the claimed limitations:

"said program causes said information mining terminal to execute: a sequence executed in such a manner that when said information mining system judges that a recorded content of an operation history of the analyzing operation is resembled to at least a portion of a recorded content of an operation history of the analyzing tool which carried out in said analyzing operation" as a computer for recording both records of two databases of a synchronization program and a history file that contains records since the previous synchronization of the program. A history file is represented as an operation history. Records of two database are represented as an operation history of the analyzing tool under analyzing operation (col. 3, lines 65-67; col. 4, lines 1-10). Comparing records in a database with records in history file to determine a matching between these two records for linking between two records (col. 10, lines 5-25).

Boothby does not explicitly teach the claimed limitation "said information mining terminal receives a notification as to said partial resemblance of said recorded contents and sequence executed in such a manner that said partial resemblance is displayed based upon a result of said notification reception." Akella teaches the retrieved snapshot data is overlaid onto the current database record and displayed to the user. The display may also visually highlight differences between the current database record and the snapshot data so that the user can easily see which fields are different between the current database record and the snapshot record (paragraph [0040]). The above information shows that in order to display a result to a user, the system had to receive a notification of searching for displaying

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Akella's teaching of the retrieved snapshot data is overlaid onto the current database record and displayed to the user. The display may also visually highlight differences between the current database record and the snapshot data so that the user can easily see which fields are different between the current database record and the snapshot record to Boothby's system in order to allow a user can easily see which fields are different and the same between the current database record and the snapshot record.

Allowable Subject Matter

11.   Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in claim 7, wherein "said history comparing unit classifies the recorded content of said consequence data holding unit into a first case that both said consequences and said operation histories are resembled to each other; into a second case that said consequences are not resembled to each other, but said operation histories are resembled to each other; into a third case that said consequences are resembled to each other, and said operation histories are not resembled to each other; and into a fourth case that both the consequences and the operation histories are not resembled to each other".

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ugai et al (US 6873983).

Contact Information

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Firday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cam Y Truong
Primary Examiner
Art Unit 2162
2/17/2007